

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A management mediating device, comprising:

a management system communication means for unit making a connection to a management system outside a fire wall from inside the fire wall, and receiving a command from the management system;

a processing means for processor performing a process in accordance with the received command, the process including to send a test signal to a hardware resource of an image forming apparatus to obtain data indicating a usage state of the image forming apparatus in a local area, the data indicating the usage state including information in response to the test signal from the hardware resource;

a management object system communication means for unit transferring the command to a management object system and for transferring the data to the management system;

a storing means for storage unit storing a connection schedule of the management system communication means unit; and

an instructing means for unit, in accordance with the connection schedule, instructing the management system communication means unit to make a connection to the management system.

Claim 2 (Currently Amended): The management mediating device according to claim 1, wherein in accordance with the connection schedule, the instructing means unit provides to the management system communication means unit at least one of:

- 1) an instruction of making a connection to the management system at a specified date and time;

- 2) an instruction of making a connection to the management system at a specified time every day;
- 3) an instruction of making a connection to the management system at a specified date and time every month;
- 4) an instruction of making a connection to the management system in a specified period at intervals of a specified value;
- 5) an instruction of making a connection to the management system in a specified period at intervals of a specified value every day; and
- 6) an instruction of making a connection to the management system from a specified date and time at intervals of a specified value for an indefinite period.

Claim 3 (Currently Amended): The management mediating device according to claim 1, wherein the connection schedule includes a start date and time, an end date and time, and a value of an interval, and in accordance with the connection schedule, the instructing ~~means~~ unit provides to the management system at least one of:

- 1) when only the start date and time is specified, an instruction of making a connection to the management system at the specified start date and time;
- 2) when only a start time of the start date and time is specified, an instruction of making a connection to the management system at the start time every day;
- 3) when only the start date and time is specified, and a month of the start date and time is not specified, an instruction of making a connection to the management system at the start date and time every month;
- 4) when all of the start date and time, the end date and time, and the value of the interval are specified, an instruction of making a connection to the management system from the start date and time to the end date and time at intervals of the value;

5) when all of the start date and time, the end date and time, and the value of the interval are specified, and only the start time and the end time of the start date and time and the end date and time are specified, an instruction of making a connection to the management system from the start time to the end time at intervals of the value every day; and

6) when the start date and time and the value of the interval are specified, and the end date and time is not specified, an instruction of making a connection to the management system from the start date and time for an indefinite period.

Claim 4 (Currently Amended): The management mediating device according to claim 1, wherein the ~~processing means~~ processor has a schedule changing function of changing the connection schedule stored in the ~~storage means~~ storage unit in accordance with the command.

Claim 5 (Currently Amended): The management mediating device according to claim 4, wherein when the command includes a schedule adding command, the ~~processing means~~ processor adds an additional connection schedule to the connection schedule stored in the ~~storage means~~ storage unit, the additional connection schedule being attached to the schedule adding command.

Claim 6 (Currently Amended): The management mediating device according to claim 4, wherein the connection schedule is constituted by a plurality of unit schedules, and an identifier is attached to each unit schedule,

when the command includes a schedule deleting command, the ~~processing means~~ processor searches the ~~storage means~~ storage unit to find the unit schedule corresponding to the identifier attached to the schedule deleting command, and deletes the found unit schedule.

Claim 7 (Currently Amended): The management mediating device according to claim 4, wherein the command includes an all schedule changing command, the ~~processing means processor~~ extracts an Internet address attached to the all schedule changing command, causes the management system communication ~~means unit~~ to obtain a new connection schedule existing at the Internet address, and replaces the connection schedule stored in the ~~storing means storage unit~~ with the new connection schedule.

Claim 8 (Currently Amended): The management mediating device according to claim 4, wherein when the command includes a schedule requiring command, the ~~processing means processor~~ reads the connection schedule from the storing means, and causes the management system communication ~~means unit~~ to provide the connection schedule to the management system.

Claim 9 (Currently Amended): The management mediating device according to claim 1, wherein the management system communication ~~means unit~~ has a SOAP processing function of making communication with the management system based on SOAP.

Claim 10 (Canceled).

Claim 11 (Currently Amended): A computer readable storing medium that stores a management mediating program that is used [[for]] ~~at~~ a management mediating device, wherein the management mediating device includes ~~a first communication means unit, processing means a processor, second communication means unit, storing means a storage unit~~ that stores a connection schedule, and ~~an~~ instructing ~~means unit~~,

the management mediating program comprising:

a first communication program code of causing the first communication ~~means~~ unit to make a connection to a management system via the Internet, and to receive a command from the management system, wherein the management mediating device is positioned at an inside of a fire wall, and the management system is positioned at an outside of the fire wall;

a processing program code of causing the ~~processing~~ means processor to perform a process in accordance with the command, the process including to send a test signal to a hardware resource of an image forming apparatus to obtain data indicating a usage state of the image forming apparatus in a local area, the data indicating the usage state including information in response to the test signal from the hardware resource;

a second communication program code of causing the second communication ~~means~~ unit to transfer the command to a management object system and to transfer the data to the management system; and

an instructing program code of, in accordance with the connection schedule, causing the instructing ~~means~~ unit to provide to the first communication an instruction of making a connection to the management system.

Claim 12 (Currently Amended): An image processing apparatus that comprises a hardware resource including at least one of a displaying unit, a printing unit, a scanner unit, a facsimile unit, a hard disk, an imaging unit and a network interface, and provides a service including at least one of a printing service, a copying service, and a facsimile service,

the image processing apparatus further comprising:

at least one application that performs a particular process for the service;

a management system communication ~~means for~~ unit making a connection to a management system from an inside of a fire wall, and receiving a command from the

management system positioned at an outside of the fire wall, and to transmit data to the management system;

a processing means for processor performing a process in accordance with the command, the process including to send a test signal to the hardware resource of the image processing apparatus to obtain data indicating a usage state of an image forming apparatus in a local area, the data indicating the usage state including information in response to the test signal from the hardware resource;

a storing means for storage unit storing a connection schedule of the management system communication means unit; and

an instructing means for unit, in accordance with the connection schedule, instructing the management system communication means unit to make a connection to the management system.

Claim 13 (Currently Amended): The image processing apparatus according to claim 12, wherein in accordance with the connection schedule, the instructing means unit provides to the management system communication means unit at least one of:

1) an instruction of making a connection to the management system at a specified date and time;

2) an instruction of making a connection to the management system at a specified time every day;

3) an instruction of making a connection to the management system at a specified date and time every month;

4) an instruction of making a connection to the management system in a specified period at intervals of a specified value;

- 5) an instruction of making a connection to the management system in a specified period at intervals of a specified value every day; and
- 6) an instruction of making a connection to the management system at a specified date and time at intervals of a specified value for an indefinite period.

Claim 14 (Currently Amended): The image processing apparatus according to claim 12, wherein the connection schedule includes a start date and time, an end date and time, and a value of an interval, and in accordance with the connection schedule, the instructing ~~means~~ unit provides to the management system at least one of:

- 1) when only the start date and time is specified, an instruction of making a connection to the management system at the specified start date and time;
- 2) when only a start time of the start date and time is specified, an instruction of making a connection to the management system at the start time every day;
- 3) when only the start date and time is specified, and a month of the start date and time is not specified, an instruction of making a connection to the management system at the start date and time every month;
- 4) when all of the start date and time, the end date and time, and the value of the interval are specified, an instruction of making a connection to the management system from the start date and time to the end date and time at intervals of the value;
- 5) when all of the start date and time, the end date and time, and the value of the interval are specified, and only the start time and the end time of the start date and time and the end date and time are specified, an instruction of making a connection to the management system from the start time to the end time at intervals of the value every day; and

6) when the start date and time and the value of the interval are specified, and the end date and time is not specified, an instruction of making a connection to the management system from the start date and time for an indefinite period.

Claim 15 (Currently Amended): The image processing apparatus according to claim 12, wherein the ~~processing means~~ processor has a schedule changing function of changing the connection schedule stored in the ~~storing means~~ storage unit in accordance with the command.

Claim 16 (Currently Amended): The image processing apparatus according to claim 15, wherein when the command includes a schedule adding command, the ~~processing means~~ processor adds an additional connection schedule to the connection schedule stored in the ~~storing means~~ storage unit, the additional connection schedule being attached to the schedule adding command.

Claim 17 (Currently Amended): The image processing apparatus according to claim 15, wherein the connection schedule is constituted by a plurality of unit schedules, and an identifier is attached to each of the unit schedule,

when the command includes a schedule deleting command, the ~~processing means~~ processor searches the ~~storing means~~ storage unit to find the unit schedule corresponding to the identifier attached to the schedule deleting command, and deletes the found unit schedule.

Claim 18 (Currently Amended): The image processing apparatus according to claim 15, wherein the command includes an all schedule changing command, the ~~processing means~~ processor extracts an Internet address attached to the all schedule changing command, causes

the management system communication ~~means~~ unit to obtain a new connection schedule existing at the Internet address, and replaces the connection schedule stored in the ~~storing~~ ~~means~~ storage unit with the new connection schedule.

Claim 19 (Currently Amended): The image processing apparatus according to claim 15, wherein when the command includes a schedule requiring command, the ~~processing~~ ~~means~~ processor reads the connection schedule from the storing means, and causes the management system communication ~~means~~ unit to provide the connection schedule to the management system.

Claim 20 (Currently Amended): The image processing apparatus according to claim 12, wherein the management system communication ~~means~~ unit has a SOAP processing function of making communication with the management system based on SOAP.

Claims 21-22 (Canceled).

Claim 23 (Previously Presented): A remote management system in which a management object system is managed by communication between a management system and a management mediating device,

wherein the management mediating device comprises:

~~a management system communication means for~~ unit making a connection to the management system outside a fire wall from inside the fire wall, and receiving a command from the management system;

~~a processing means for~~ processor performing a process in accordance with the received command, the process including to send a test signal to a hardware resource of an

image forming apparatus to obtain data indicating a usage state of the image forming apparatus in a local area, the data indicating the usage state including information in response to the test signal from the hardware resource;

a management object system communication means for unit transferring the command to a management object system and for transferring the data to the management system;

a storing means for storage unit storing a connection schedule of the management system communication means unit; and

an instructing means for unit, in accordance with the connection schedule, instructing the management system communication means to make a connection to the management system,

and wherein the processing means processor changes the connection schedule stored in the storing means storage unit in accordance with a schedule changing command received from the management system.

Claim 24 (Currently Amended): A remote management method of managing a management object system by communication between a management mediating device and a management system, the method comprising ~~the steps of~~:

- a) making a connection, via the Internet, from inside a fire wall to the management system outside the fire wall;
- b) receiving a command from the management system by using the connection;
- c) performing a process in accordance with the command to send a test signal to a hardware resource of an image forming apparatus to obtain data indicating a usage state of the image forming apparatus in a local area, the data indicating the usage state including information in response to the test signal from the hardware resource;

d) transferring the command to a management object system and transferring the data to the management system;

e) storing a connection schedule;

f) providing an instruction so that at the step a), the connection is made in accordance with the connection schedule; and

g) when the command is a schedule changing command, changing the stored connection schedule in accordance with the schedule changing command.